

Office Action Summary	Application No. 10/723,573	Applicant(s) YURI, KIYOSHI	
	Examiner ERICK REKSTAD	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a Final Office Action in response to the Amendment filed on March 28, 2008.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Douglas Holtz on August 29, 2008.

The application has been amended as follows:

Replace claim 9 with the below claim.

9. (Currently Amended) A microscopic image capturing method for use with a microscopic image capture apparatus, said method comprising:

capturing an image of a wide-angle view of an entire observing slide by a low magnification optical system;

extracting a sample image area including a sample image from the captured image of wide-angle view;

automatically setting a plurality of horizontal positions in which a height coordinate Z is acquired from ~ the extracted sample image area;

replacing the low magnification optical system with a high magnification optical system;

reading a height coordinate which is a focal point position of the high magnification optical system in each of the set horizontal positions;

computing an adjusted position of a focal point in an arbitrary position in ~ the sample image area using the set horizontal positions and height coordinate data read in the set horizontal positions; and

transferring a height of a sample to the computed adjusted focal position when the sample is horizontally traveled.

Response to Arguments

Applicant's arguments with respect to claims 1-3 and 9 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,215,892 to Douglass et al.

[claim 9]

As shown in Figure 2, Douglass teaches a system for a microscopic image capture apparatus. The apparatus includes a low magnification optical system and a high magnification optical system (44 and 44a, Fig. 4). Note, the turret (44) changes the magnification. The system further includes the hardware to provide an automated scanning for candidate cells at a low magnification, refocusing at a higher magnification and performing further analysis to confirm the cell candidate (Col 5 Line 55-Col 6 Line 10). The system is run by a system processor (23) and microscope controller (31) (Col 5 Lines 20-34).

Art Unit: 2621

The system performs the operation of capturing an image of a wide-angle view of an entire observing slide by a low magnification optical system and extracting a sample image area including a sample image from the captured image of wide-angle view (Col 10 Lines 12-21).

Douglass further teaches one method of performing auto focus at a high magnification is to automatically set a plurality of horizontal positions in which a height coordinate Z is acquired from the extracted sample image area and reading a height coordinate which is a focal point position of the high magnification optical system in each of the set horizontal positions (Col 11 Lines 9-12, Col 11 Lines 24-40, Col 12 Lines 20-26). Once the focus positions are obtained for the set horizontal positions, adjusted position of a focal point in an arbitrary position in the sample image area using the set horizontal positions and height coordinate data is computed (Col 11 Lines 57-65). The height value is used to adjust the microscope in order to capture an image (Col 11 Lines 61-62).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,215,892 to Douglass et al.

[claim 1]

Art Unit: 2621

As shown in Figure 2, Douglass teaches a system for a microscopic image capture apparatus. The apparatus includes a low magnification optical system and a high magnification optical system (44 and 44a, Fig. 4). Note, the turret (44) changes the magnification. The system further includes the hardware to provide an automated scanning for candidate cells at a low magnification, refocusing at a higher magnification and performing further analysis to confirm the cell candidate (Col 5 Line 55-Col 6 Line 10). The system is run by a system processor (23) and microscope controller (31) (Col 5 Lines 20-34).

The system performs the operation of capturing an image of a wide-angle view of an entire observing slide by a low magnification optical system and extracting a sample image area including a sample image from the captured image of wide-angle view (Col 10 Lines 12-21).

Douglass further teaches one method of performing auto focus at a high magnification is to automatically set a plurality of horizontal positions in which a height coordinate Z is acquired from the extracted sample image area and reading a height coordinate which is a focal point position of the high magnification optical system in each of the set horizontal positions (Col 11 Lines 9-12, Col 11 Lines 24-40, Col 12 Lines 20-26). Once the focus positions are obtained for the set horizontal positions, adjusted position of a focal point in an arbitrary position in the sample image area using the set horizontal positions and height coordinate data is computed (Col 11 Lines 57-65). The height value is used to adjust the microscope in order to capture an image (Col 11 Lines 61-62). Though Douglass is silent on the specific hardware units required by the claim

Art Unit: 2621

it would have been obvious to one of ordinary skill in the art at the time of the invention to replace the software based implementation of Douglass with a hardware based implementation as a design choice since the resulting apparatus is an obvious variation and would provide the same results.

[claims 2 and 3]

Douglass further teaches the apparatus uses a grid of points centered on the scan area and obtains focus positions using the auto-focusing method of Figure 13a (Col 11 Lines 41-56, Figs 14 and 15). As shown in Figure 15, the grid points are at predetermined intervals.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2621

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERICK REKSTAD whose telephone number is (571)272-7338. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. R./

Examiner (Partial Signatory Authority), Art Unit 2621

/Gims S Philippe/

Primary Examiner, Art Unit 2621